



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0459; Project Identifier MCAI-2021-00266-E; Amendment 39-22102; AD 2022-13-16]

RIN 2120-AA64

Airworthiness Directives; GE Aviation Czech s.r.o. (Type Certificate Previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.) Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all GE Aviation Czech s.r.o. (GEAC) M601D-11 model turboprop engines. This AD was prompted by the manufacturer revising the airworthiness limitations section (ALS) of the existing engine maintenance manual (EMM) to include a visual inspection of the centrifugal compressor case for cracks. This AD requires revising the ALS of the existing EMM to incorporate a visual inspection of the centrifugal compressor case. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact GE Aviation Czech, Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic; phone: +420 222 538 999; email: tp.ops@ge.com. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0459; or in person at Docket Operations between 9

a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: barbara.caufield@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all GEAC M601D-11 model turboprop engines. The NPRM published in the *Federal Register* on April 14, 2022 (87 FR 22149). The NPRM was prompted by the manufacturer revising the ALS of the existing EMM to include a visual inspection of the centrifugal compressor case for cracks. In the NPRM, the FAA proposed to require revising the ALS of the existing EMM to incorporate a visual inspection of the centrifugal compressor case for cracks. In the NPRM, the FAA proposed that an owner/operator (pilot) holding at least at least a private pilot certificate may revise the ALS of the existing EMM, and the owner/operator must enter compliance with the applicable paragraphs of the AD into the aircraft records in accordance with 14 CFR 43.9(a) and 14 CFR 91.417(a)(2)(v). This is an exception to the FAA's standard maintenance regulations. The FAA is issuing this AD to address the unsafe condition on these products.

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0060, dated March 3, 2021 (referred to after this as "the MCAI"), to address the unsafe condition on these products. The MCAI states:

The airworthiness limitations for certain M601 engine models, which are approved by EASA, are currently defined and published in the ALS.

These instructions have been identified as mandatory for continued airworthiness.

Failure to accomplish these instructions could result in an unsafe condition.

Recently, GEAC published the ALS, as defined in this [EASA] AD, introducing a visual inspection of the Centrifugal Compressor Case.

For the reason described above, this [EASA] AD requires accomplishment of the actions specified in the ALS.

You may obtain further information by examining the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0459.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information

The FAA reviewed GE Aviation Czech Airworthiness Limitations R18, Section 5. Mandatory Inspections, of the GE Aviation Czech EMM, Part No. 0982309, Revision No. 18, dated December 18, 2020 (Airworthiness Limitations R18, Section 5. Mandatory Inspections). Airworthiness Limitations R18, Section 5. Mandatory Inspections, of the EMM describe procedures for performing a visual inspection of the centrifugal compressor case for cracks.

Costs of Compliance

The FAA estimates that this AD affects 7 engines installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Revise the ALS of the EMM	1 work-hour x \$85 per hour = \$85	\$0	\$85	\$595

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2022-13-16 GE Aviation Czech s.r.o (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.): Amendment 39-22102; Docket No. FAA-2022-0459; Project Identifier MCAI-2021-00266-E.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to GE Aviation Czech s.r.o. M601D-11 model turboprop engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7230, Turbine Engine Compressor Section.

(e) Unsafe Condition

This AD was prompted by the manufacturer revising the airworthiness limitations section (ALS) of the existing engine maintenance manual (EMM) to include a visual inspection of the centrifugal compressor case for cracks. The FAA is issuing this AD to prevent failure of the centrifugal compressor case. The unsafe condition, if not addressed, could result in failure of the centrifugal compressor case, engine separation, and loss of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 90 days after the effective date of this AD, revise the ALS of the existing EMM by incorporating Figure 1 to paragraph (g)(1) of this AD.

Figure 1 to Paragraph (g)(1) – Visual Inspection of the Centrifugal Compressor Case

5. Mandatory Inspections

5.1 Visual inspection of Centrifugal Compressor Case

Accomplishment Instruction

Do a visual inspection of the compressor case in the specified areas, shown in Figure 1, for every 100 ± 10 Flight Hours. Use magnifying lens 10x for inspection. No visible cracks are allowed.

Equipment:

The following equipment is required and may be obtained as shown:

- A 150-watt standard spotlight or 40-watt high intensity spotlight or alternative (Commercial) to acquire necessary illumination at minimum 1000lux.
- Magnification equipment 10x (Commercial).

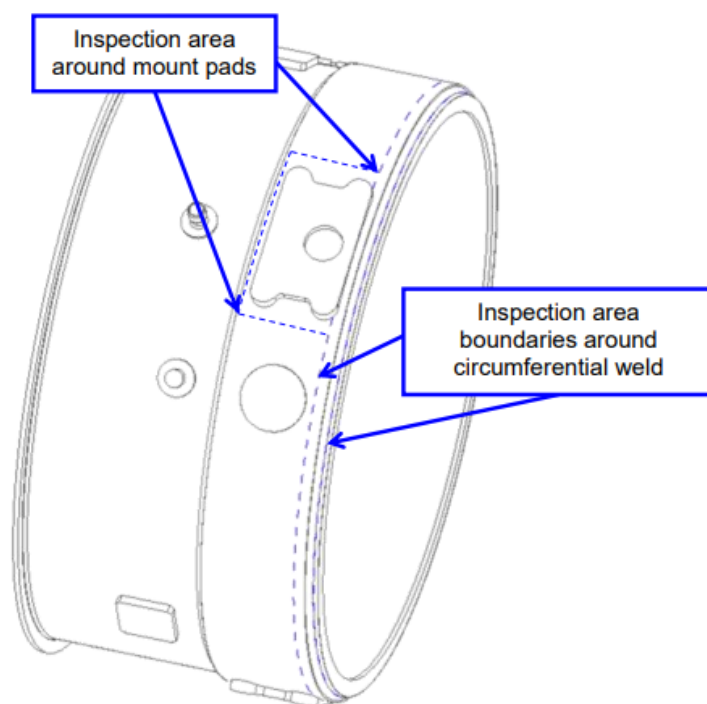


Figure 1. Centrifugal Compressor Case

(2) After revising the ALS of the existing EMM required by paragraph (g)(1) of this AD, no alternative inspection intervals may be used unless they are approved as provided in paragraph (h) of this AD.

(3) The action required by paragraph (g)(1) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR 43.9(a) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ECO Branch, send it to the attention of the person identified in paragraph (i)(1) of this AD and email it to: ANE-AD-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) For more information about this AD, contact Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: barbara.caufield@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2021-0060, dated March 3, 2021, for more information. You may examine the EASA AD in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2022-0459.

(j) Material Incorporated by Reference

None.

Issued on June 17, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2022-13503 Filed: 6/24/2022 8:45 am; Publication Date: 6/27/2022]